CALL FOR PAPERS - LAD'25 1st IEEE International Conference on LLM-Aided Design June 26-27 2025, Stanford, CA

https://iclad.ai/

This new international conference will focus on how to use Large Language Models (LLMs) to help design circuits, software, and computing systems with improved quality, productivity, robustness, and cost. Building on the success of last year's LAD workshop, we're excited to announce the first-ever international LAD conference! The conference will be a timely venue that will host leading researchers and thought leaders in this fast-growing area, providing a forum for researchers and practitioners to present their latest results, contribute open-source models, datasets, and tool flows, and offer benchmarking, testing, and validation methods and solutions.

The main theme of LAD this year will revolve around **agentic optimization and scaling inference-time methods**, but we welcome a broad range of topics on new methodologies, tools, datasets, and benchmarks pertaining to:

- → Agentic workflows for design automation and optimization
- → Inference-time techniques for design
- → LLM-aided HW/SW design, code generation, and test plan generation
- → System-level design methodology development with LLMs
- → Finetuning of large foundation models for specialization in design automation
- → New datasets and benchmarks of relevance to LLM-aided design
- → Evaluation and verification of LLM-aided designs
- → LLM-aided design for software development, IT automation, site reliability, and regulatory compliance.

- → LLMs for EDA, including RTL, HLS, physical design, and EDA scripting
- → LLMs for reasoning and logic used in design process
- → Computational efficiency of LLM-aided design tools
- → Data science and data analytics for LLM-aided design
- → Security of LLM-generated designs
- → Privacy, copyright, and other regulatory concerns around LLM-aided design
- → LLM-aided bug-fixing
- → LLM-aided design for various application domains, such as 3D manufacturing, material discovery, sustainability, etc.

SUBMISSION INSTRUCTIONS

The conference invites <u>up to</u> 6-page regular papers in the IEEE Conference format (<u>https://www.ieee.org/conferences/publishing/templates.html</u>). Page limits do not include references. Papers should be anonymized for double-blind peer review. We encourage papers with a commitment to open and reproducible research, including datasets and methods. Papers

with open-source implementations will be highlighted at the conference. All papers will be published on IEEEXplore. Papers can be submitted via OpenReview (<u>https://openreview.net/group?id=IEEE.org/LAD/2025</u>) by Friday, Feb. 28th, 2025 AoE. See the conference website (https://iclad.ai/) for more details.

DATASETS AND BENCHMARKS PAPERS

LAD'25 welcomes papers describing new Datasets and Benchmarks of relevance to the LLM-Aided Design community. Papers describing new datasets and benchmarks must follow the exact same rules and procedures as regular (up to) 6-page papers; they will be peer reviewed; and accepted papers will be published in the proceedings. Datasets and Benchmarks papers must include an explicit commitment to releasing all artifacts publicly if accepted. The commitment should be added to the Conclusion section of the paper.

IMPORTANT DATES

Full paper submission:	Feb 28th, 2025, AoE
Notification of acceptance:	May 8th, 2025, AoE
Camera ready paper due:	May 22nd, 2025, AoE

PAPER FORMATTING

Authors should follow the recommended IEEE Conference format for their submissions to ensure compatibility with IEEEXplore. Manuscripts must be anonymized to avoid disclosing author identities. LAD'25 encourages open-source and reproducible research. Authors can provide anonymized URLs to their datasets and methods in the paper, or commit to open release on paper acceptance. However, this is not mandatory for regular papers. For Datasets and Benchmarks papers, there is a specific requirement to release all artifacts publicly if accepted.

POLICY ON SUBMISSIONS

LAD'25 expects previously unpublished papers describing original research. Accepted LAD'25 papers will appear on IEEEXplore and count as formal, copyrighted, archival publications.

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